

1     **Claim 1. through Claim 18. (cancelled)**

1     **Claim 19. (new)** A classification and management system for patients with  
2     lower extremity arterial occlusive disease comprising a network of remotely  
3     located computers from healthcare facilities, an evaluating authority and  
4     accredited laboratory integrated to implement the steps on-line of:

- 5         • entering and storing collected patient data of physically observable  
6             conditions of the patient's lower extremities and noninvasive arterial  
7             pressure and blood flow data in the memory of a computer at the  
8             healthcare facility,
- 9         • transmitting said collected patient data from the healthcare facility  
10             computer to a computer at an evaluating authority,
- 11         • receiving and storing the collected patient data in the computer at the  
12             evaluating authority to review and compare said collected patient data  
13             against a medically accepted set of disease specific criteria at the  
14             evaluating authority to classify patients as "potentially at risk" and "not  
15             at risk" of developing complications of arterial occlusive disease,
- 16         • entering and storing patient classification data in the memory of the  
17             computer at the evaluation authority,
- 18         • transmitting said patient classification data from the evaluating authority  
19             computer to the computer at the healthcare facility,
- 20         • receiving and storing the patient classification data in the computer at  
21             the healthcare facility,
- 22         • transmitting the "potentially at risk" patient data from the healthcare  
23             facility to the accredited laboratory,
- 24         • entering and storing the "potentially at risk" patient data in a computer  
25             at an accredited laboratory to evaluate those "potentially at risk"  
26             patients at the accredited laboratory against medically accepted criteria,
- 27         • entering and storing the data results of said noninvasive vascular  
28             evaluation in the memory of the computer at the accredited laboratory,
- 29         • transmitting said stored data results from the accredited laboratory  
30             computer to the computer at the evaluating authority for final  
31             classification,
- 32         • receiving and storing the stored data results in the computer at the  
33             evaluating authority to classify each patient at the evaluating authority

- 34 against medically accepted criteria as “at risk” or “not at risk” of  
35 developing arterial occlusive disease,
- 36 • entering and storing patient classification in the memory of the  
37 computer at the evaluation authority,
- 38 • transmitting said “at risk” or “not at risk” patient final classification from  
39 the evaluation computer to the computer at the healthcare facility,
- 40 • entering and storing said “at risk” or “not at risk” patient final  
41 classification at the healthcare facility computer and transmitting data  
42 from the healthcare facility computer database having a final  
43 classification of “at risk” for critical ischemia with associated extremity  
44 lesions and patients with noninvasive evidence of severe ischemia to a  
45 vascular surgery facility for vascular surgical assessment to determine  
46 whether revascularization is necessary,
- 47 • reviewing the data and assessing such “at risk” patients against  
48 medically accepted criteria as “clinical indication for operation” or “no  
49 indication for operation” at the vascular surgery facility,
- 50 • electing revascularization and periodic management system evaluation  
51 at the healthcare facility or routine wound care and periodic revaluation  
52 at the healthcare facility by patients assessed as “clinical indication for  
53 operation”,
- 54 • monitoring patients assessed as “no indication for operation” by the  
55 healthcare facility with increased precautions to monitor for detection of  
56 any visible deterioration of the patient’s lower extremities that would  
57 require reassessment,
- 58 • referring patients having ulcers, pain or gangrene at the time of “no  
59 indication for operation” assessment for reassessment,
- 60 • referring patients classified as “no indication for operation” that develop  
61 ulcers, pain and/or gangrene to the vascular surgery facility for  
62 reassessment,
- 63 • reassessing the referred patient at the vascular surgery facility against  
64 medically accepted criteria as “no indication for operation” or “clinical  
65 indication for operation”,
- 66 • entering and storing the reassessment in a memory of a computer at  
67 the vascular surgery facility,
- 68 • transmitting the reassessment of “no indication for operation” or “clinical  
69 indication for operation” from the vascular surgery facility computer to

70 the computer at the evaluating authority for reevaluation as "no  
71 indication for operation" or "clinical indication for operation",

72 • transmitting the reevaluation from the evaluating authority computer to  
73 the computer at the healthcare faculty with the appropriate medical  
74 procedure and regimen for treating and monitoring patients classified as  
75 "not at risk", "at risk" and assessed as "no indication for operation" or  
76 "clinical indication for operation" at the healthcare facility,

77 • receiving and storing patient treatment and progress data in the  
78 memory of the computer at the healthcare facility to provide "not at risk"  
79 patients without limb ulcers routine care and precautions at the  
80 healthcare facility, "not at risk" patients with limb ulcers routine wound  
81 care at the healthcare facility and providing "not at risk" patients with  
82 limb ulcers periodic reevaluation by the evaluating authority,

83 • entering and storing the periodic patient reevaluations in the memory of  
84 the computer at the evaluating authority to provide "at risk" patients  
85 assessed as "no indication for operation" or "operation not elected by  
86 patient", and "clinical indication for operation" patient undergoing  
87 revascularization at the vascular surgery facility with intensive wound  
88 care at the healthcare facility,

89 • entering and storing patient treatment and evaluation of patients in the  
90 memory of the computer at the vascular surgery facility,

91 • transmitting the patient treatment and evaluation data of patients from  
92 the vascular surgery facility to the healthcare facility,

93 • receiving and storing the patient treatment and evaluation data of  
94 patients in the computer at the healthcare facility,

95 • recording periodic reevaluations of "at risk" patients data assessed as  
96 "no indication for operation" or "operation not elected by patient" with  
97 increased precautions at the healthcare facility.